

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLI	CATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/875,237		06/06/2001		Douglas F. Fry	U 0045 OS/TEAP	7303	
23	23657 7590 07/05/2005				EXAM	EXAMINER	
COGNIS CORPORATION					SANDERS, KRIELLION ANTIONETTE		
PATENT DEPARTMENT							
3	00 BROOK	SIDE AV	ENUE	ART UNIT	PAPER NUMBER		
AMBLER, PA 19002				1714			

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			•				
	Application No.	Applicant(s)					
Office Antion Commence	09/875,237	FRY ET AL.					
Office Action Summary	Examiner	Art Unit					
	Kriellion A. Sanders	1714					
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with th	e correspondence address					
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFI after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory pe - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b).	ON. R 1.136(a). In no event, however, may a reply be reply within the statutory minimum of thirty (30) riod will apply and will expire SIX (6) MONTHS for latute, cause the application to become ABANDO	e timely filed days will be considered timely. rom the mailing date of this communication. DNED (35 U.S.C. § 133).					
Status ·							
1) Responsive to communication(s) filed on 2	5 April 2005.						
·	This action is non-final.						
3) Since this application is in condition for allo	owance except for formal matters,	prosecution as to the merits is					
closed in accordance with the practice und	er Ex parte Quayle, 1935 C.D. 11,	453 O.G. 213.					
Disposition of Claims							
4) Claim(s) 1-30 is/are pending in the application	tion.						
4a) Of the above claim(s) is/are with							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-30</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction ar	nd/or election requirement.						
Application Papers							
9) The specification is objected to by the Exan	niner.	•					
10)☐ The drawing(s) filed on is/are: a)☐	0) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to	the drawing(s) be held in abeyance.	See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the col		-					
11) The oath or declaration is objected to by the	e Examiner. Note the attached Off	ice Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:	eign priority under 35 U.S.C. § 119	(a)-(d) or (f).					
1. Certified copies of the priority docum							
2. Certified copies of the priority docum							
3. Copies of the certified copies of the	•	eived in this National Stage					
application from the International Bu		ivad					
* See the attached detailed Office action for a	ust of the certified copies not rece	iveu.					
Attachment(s)							
Notice of References Cited (PTO-892)	4) Interview Summ	ary (PTO-413)					
2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mai	I Date					
Information Disclosure Statement(s) (PTO-1449 or PTO/SB Paper No(s)/Mail Date	6) Other:	al Patent Application (PTO-152)					

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

This rejection is repeated for reasons set forth in the rejections mailed 10/10/2003 and 5/27/2004.

The following remarks are in response to applicant's comments submitted 4/25/2005.

- 1. Claims 1-30 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-42 of U.S. Patent No. 6,399,741. Although the conflicting claims are not identical, they are not patentably distinct from each other.
- 2. Applicant's claims 1-11 are directed to a polymer derivative that is fully described in patentees' claims.

It is clear that the polyalkyleneimine polymers of the patent overlap with those of applicant's claims.

Application/Control Number: 09/875,237

Art Unit: 1714

3. Applicant's claim 1 recites a polymer derivative comprising a polyalkyleneimine

backbone having a number of reactive amino functionalities, each reactive amino functionality

Page 3

having at least one reactive hydrogen atom, wherein about 20% to about 60% of the number of

reactive amino functionalities have a substituent-compound substituted in place of the at least

one reactive hydrogen atom each substituent-compound independently selected from the group

consisting of carboxylic acids having from about 14 to about 20 carbon atoms.

4. Claim 1 of the patent recites, "a polymer derivative comprising a polyalkyleneimine

backbone having a number of reactive amino functionalities, each reactive amino functionality

having at least one reactive hydrogen atom, wherein a color stabilizing-effective amount of the

number of reactive amino functionalities have a substituent-compound independently selected

from the group consisting of carboxylic acids and amine-protecting compounds substituted in

place of the at least one reactive hydrogen atom, and wherein at least about 20% of the reactive

amino functionalities have a carboxylic acid substituted in place of the at least one reactive

hydrogen atom.

Applicant's claim 1 recites that about 20% to about 60% of the number of reactive amino

functionalities have a substituent-compound substituted in place of the at least one reactive

hydrogen atom

5. Claim 1 of the patent states that at least about 20% of the reactive amino functionalities

have a carboxylic acid substituted in place of the at least one reactive hydrogen atom.

6. Both the patented and present inventions suggest that "about 20% of the reactive amino

functionalities have a carboxylic acid substituted in place of the at least one reactive hydrogen

atom".

- 7. There is clear overlap between the patented and presently claimed inventions. The claims define the metes and bounds of the invention.
- 8. Claim 4 of the patent recites that the carboxylic acids of claim 1 have from 2-18 carbon atoms.
- 9. Claim 1 of the application recites that the carboxylic acids have from 14-20 carbon atoms.
- 10. The presently claimed invention is not seen to be patentably distinct from the patented invention of Fry et al.
- 11. The clear overlap in the claim limitations of the patented and present claims render applicant's invention obvious.

RESPONSE TO ARGUMENTS

Applicant avers that the current claims differ from the claims of Frye et al '741 for three reasons.

The first reason is that applicant's claims require 20-60% of reactive amino functionalities having substituent compounds substituted in place of the at least one reactive amino functionalities as the preferred color-stabilizing-effective amount. Applicant indicates that Frye et al allegedly differs in this limitation in that Frye et al claims "a color stabilizing effective amount" and then describes this amount in greater detain in the specification as being an amount which is at least about 60-65% of the total number of reactive amino functionalities present in a given polyalkyleneimine backbone. Applicant surmises that these amounts are clearly distinct from each other. This argument is not persuasive in that both patent and present application indicate that the total amount of reactive amino functionalities having substituent

compounds substituted in place of the at least one reactive amino functionalities may be 60% in both application and patent. Therefore, there is clear overlap in the claim limitations of the patented and present claims. This overlap renders applicant's invention obvious.

The second reason applicant argues that the current claims differ from the claims of Frye et al '741 is that the types of substituents replacing the at least one hydrogen atom are selected from the group consisting of carboxylic acids and amine protecting compounds, each of these substituents having from about 14 to 20 carbon atoms. Applicant argues that the Frye specification at col. 6, lines 8-11 indicates that the carboxylic acids and amine protecting compounds of the patent 'are generally reacted with the polyalkyleneimine in a acid: protectant molar ratio of from about 1:4 to about 4:1.' Thus, at least 20% of these substituents is always an amine protecting compound". Applicant then concludes that this is an indication that the polyalkyleneimines of the present invention are distinct from those of the patent to Frye et al. This argument has not been found to be persuasive in that applicant has provided no clear distinction in the types or amounts of the claimed carboxylic acids of the present or patented invention. Claim 1 of Frye does not require that amine protecting compounds replace the at least one hydrogen atom. Therefore, formulation of polyalkyleneimines wherein the types of substituents replacing the at least one hydrogen atom are selected from the group consisting of carboxylic acids only would have been obvious to one of ordinary skill in the art at the time of applicant's invention.

The third reason applicant argues that the current claims differ from the claims of Frye et al '741 is that claim 1 of Frye et al states, "wherein at least about 20% of the reactive amino functionalities have a carboxylic acid substituted in place of the at least one reactive hydrogen

atom." Applicant avers that this amount refers to the previously described 60-65% being the amount of the number of reactive amino functionalities as described in the specification of Fry et al at co. 4, lines 39-44.

This argument is not persusive because claim 1 refers to a polyalkyleneimine backbone having a number of reactive amino functionalities, each reactive amino functionality having at least one reactive hydrogen atom, wherein a color stabilizing-effective amount of the number of reactive amino functionalities have a substituent-compound independently selected from the group consisting of carboxylic acids and amine-protecting compounds substituted in place of the at least one reactive hydrogen atom, and wherein at least about 20% of the reactive amino functionalities have a carboxylic acid substituted in place of the at least one reactive hydrogen atom. The claimed invention of Frye et al would render applicant's polyalkyleneimines having no amine protecting substituents present, obvious. The substituent groups of the claim are selected from the group consisting of carboxylic acids and amine-protecting compounds.

Conclusion

12. This is a RCE of applicant's earlier Application No. 09/875,237. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, THIS ACTION IS MADE FINAL even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Wednesday 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2351.

Kriellion A. Sanders Primary Examiner Art Unit 1714

ks